

Assignment 4.4: Questions 6, 67 – 75 odd, 112

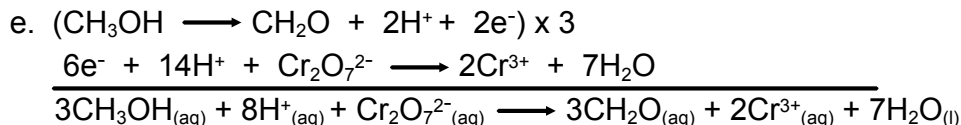
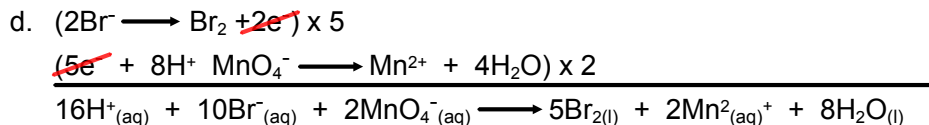
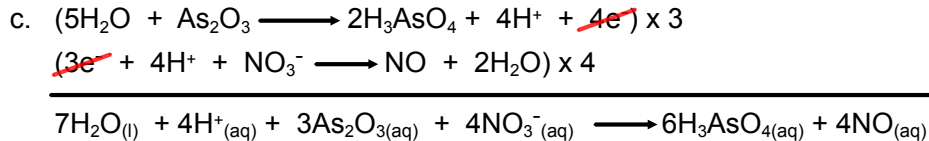
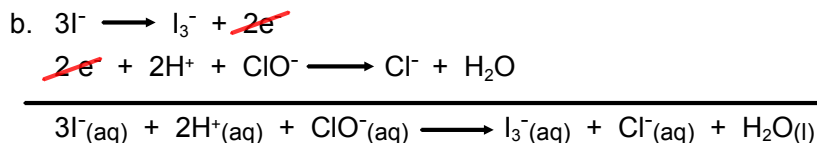
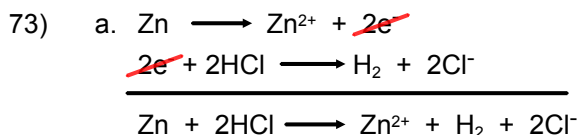
6) The charge of the element is reduced (gained negative charges.)

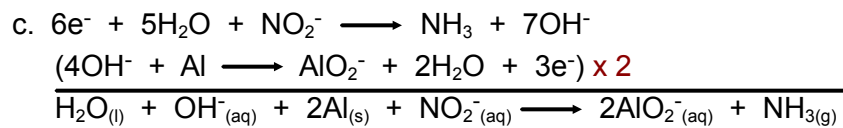
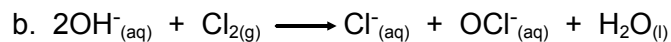
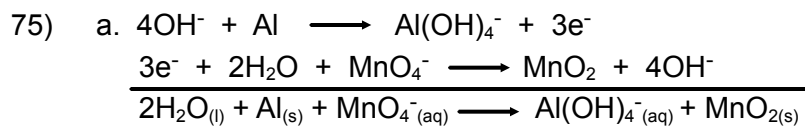
67) Assign oxidation states for all of the atoms in each of the following:

- | | |
|-------------------------------------|----------------------------|
| a. K (+1), Mn (+7), O (-2) | f. Fe (+8/3), O (-2) |
| b. Ni (+4), O (-2) | g. Xe (+6), O (-2), F (-1) |
| c. Na (+1), Fe (+2), O (-2), H (+1) | h. F (-1), S (+4) |
| d. NH_4^+ and HPO_4^{2-} | i. O (-2), C (+2) |
| N (-3), H (+1), P (+6), O (-2) | j. H (+1), O (2-), C (0) |
| e. P (+3), O (-2) | |

- 69) a. -3 b. -3 c. -2 d. +2 e. +1
 f. +4 g. +3 h. +5 i. 0

- 71) a. Yes. Oxidizing Agent = Ag^+ Reducing agent = Cu
 Substance oxidized = Cu Substance Reduced = Ag^+
 d. Yes. Oxidizing Agent = $SiCl_4$ Reducing agent = Mg
 Substance oxidized = Mg Substance Reduced = $SiCl_4$





112)

extra credit

